

Executive Summary – Enforcement Matter – Case No. 47764
MEMC Pasadena, Inc.
RN101062099
Docket No. 2013-1858-AIR-E

Order Type:

1660 Agreed Order

Findings Order Justification:

N/A

Media:

AIR

Small Business:

No

Location(s) Where Violation(s) Occurred:

MEMC Pasadena, 3000 North South Street, Pasadena, Harris County

Type of Operation:

Polysilicon manufacturing plant

Other Significant Matters:

Additional Pending Enforcement Actions: No

Past-Due Penalties: No

Other: N/A

Interested Third-Parties: None

Texas Register Publication Date: September 5, 2014

Comments Received: No

Penalty Information

Total Penalty Assessed: \$158,200

Amount Deferred for Expedited Settlement: \$31,640

Amount Deferred for Financial Inability to Pay: \$0

Total Paid to General Revenue: \$63,280

Total Due to General Revenue: \$0

Payment Plan: N/A

SEP Conditional Offset: \$63,280

Name of SEP: Houston-Galveston Area Council (Third-Party Pre-Approved)

Compliance History Classifications:

Person/CN - Satisfactory

Site/RN - Satisfactory

Major Source: Yes

Statutory Limit Adjustment: N/A

Applicable Penalty Policy: September 2002

Investigation Information

Complaint Date(s): N/A

Complaint Information: N/A

Date(s) of Investigation: June 17, 2013

Date(s) of NOE(s): August 26, 2013

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Violation Information

1. Failed to comply with permitted emission rates. Specifically, during a stack test conducted on February 18, 2011, it was determined that the nitrogen oxides ("NOx") emission rate was 0.31 pound per hour ("lb/hr") for Emissions Point Number ("EPN") Y-C-201 and 0.59 lb/hr for EPN Y-C-301, exceeding the permitted emission rates of 0.23 lb/hr, resulting in the release of approximately 9,873.6 lbs of unauthorized NOx emissions [30 TEX. ADMIN. CODE §§ 116.115(c) and 122.143(4), Federal Operating Permit ("FOP") No. 01412, Special Terms and Conditions ("STC") Nos. 7(a)(i) and 11, Air Permit No. 9597, Special Conditions ("SC") No. 1, and TEX. HEALTH & SAFETY CODE § 382.085(b)].
2. Failed to comply with the representations with regard to construction plans and operation procedures in an application for a permit. Specifically, on August 10, 2010, the emissions from Vent VP-9840/VP-9841 were authorized to be routed to EPN Y-E-7 and the emissions from Oil Scrubbers D-9104/D-91104 were authorized to be routed to EPN Y-E-2, but the Respondent began routing the emissions from Vent VP-9840/VP-9841 to EPNs Y-E-7 and Y-E-7B on January 4, 2011 and began routing the emissions from Oil Scrubbers D-9104/D-91104 to EPNs Y-E-2 and Y-E-2B on April 15, 2011, resulting in approximately 50 lbs of unauthorized particulate matter ("PM") emissions, 50 lbs of unauthorized PM equal to or less than 10 microns in diameter emissions, and 306.4 lbs of unauthorized volatile organic compounds ("VOC") emissions [30 TEX. ADMIN. CODE §§ 116.115(c) and 116.116(a), Air Permit No. 9597, SC No. 1, and TEX. HEALTH & SAFETY CODE § 382.085(b)].
3. Failed to authorize all emission points. Specifically, Vent VP-9840/VP-9841, EPN Y-E-7, was routed to EPNs Y-E-7 and Y-E-7B on January 4, 2011 and Oil Scrubber D-9104/D-91104, EPN Y-E-2, was routed to EPNs Y-E-2 and Y-E-2B on April 15, 2011 and put into service prior to obtaining a FOP revision [30 TEX. ADMIN. CODE § 122.221(a)(2) and TEX. HEALTH & SAFETY CODE §§ 382.054 and 382.085(b)].
4. Failed to comply with permitted emission rates. Specifically, during stack tests conducted on May 12, 2010 for EPN Y-D-204 and on August 4, 2010 for EPN Y-D-4, it was determined that the emissions rate of silane-containing VOC from the LUWA Scrubber R-94150, EPN Y-D-4, was 2.91 lbs/hr and from the LUWA Scrubber R-94250, EPN Y-D-204, was 4.15 lbs/hr, exceeding the permitted emission rates of 0.63 lb/hr, resulting in total unauthorized emissions of silane - containing VOC of 169,406.4 lbs [30 TEX. ADMIN. CODE §§ 116.115(c) and 122.143(4), FOP No. 01412, STC No.11, Air Permit No. 9597, SC No. 1, and TEX. HEALTH & SAFETY CODE § 382.085(b)].

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Corrective Actions/Technical Requirements

Corrective Action(s) Completed:

The Respondent has implemented the following corrective measures:

- a. On November 9, 2012, reconsolidated EPNs Y-E-2 and Y-E-2B to EPN Y-E-2 and obtained a permit amendment for Air Permit No. 9597 to address the split of EPN Y-E-7; and
- b. On February 20, 2014, submitted a FOP renewal and revision request in order to obtain FOP authorization for all emission points.

Technical Requirements:

- 1. The Order will require the Respondent to implement and complete a Supplemental Environmental Project ("SEP"). (See SEP Attachment A)
- 2. The Order will also require the Respondent to:
 - a. Within 30 days:
 - i. Implement measures and/or procedures to ensure compliance with permitted emission rates for EPN Y-C-201; and
 - ii. Commence an engineering study to determine whether compliance with permitted emission rates for EPNs Y-D-4 and Y-D-204 are expected to be most practically achieved by obtaining a permit amendment that will increase the maximum allowable emissions rates, by installing pollution control equipment, or by some combination thereof.
 - b. Within 45 days, submit written certification to demonstrate compliance with Ordering Provision a.
 - c. Within 60 days, implement measures and/or procedures to ensure compliance with the permitted emission rates for EPN Y-C-301;
 - d. Within 75 days, submit written certification to demonstrate compliance with Ordering Provision c.
 - e. Within 90 days, complete the engineering study outlined in Ordering Provision a.ii.
 - f. Within 105 days, submit written certification to demonstrate compliance with Ordering Provision e.

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g. Within 180 days:

i. Implement measures and/or procedures to ensure compliance with permitted emission rates for EPNs Y-D-4 and/or Y-D-204; or

ii. Submit a permit amendment application to increase the permitted emission rates of EPNs Y-D-4 and/or Y-D-204.

h. Within 195 days, submit written certification to demonstrate compliance with Ordering Provisions g.i. and/or g.ii.

i. For the FOP renewal and revision request filed on February 20, 2014 and if any permit application is submitted for Ordering Provision g.ii., then respond completely and adequately, as determined by the TCEQ, to all requests for information concerning the renewal and/or amendment within 30 days after the date of such requests, or by any other deadline specified in writing.

j. Within 365 days, submit written certification to demonstrate that the FOP and any applicable New Source Review permit authorization has been obtained for the affected emissions points or operation of the affected emissions points has ceased until such time that a proper authorization is obtained.

Litigation Information

Date Petition(s) Filed: N/A

Date Answer(s) Filed: N/A

SOAH Referral Date: N/A

Hearing Date(s): N/A

Settlement Date: N/A

Contact Information

TCEQ Attorney: N/A

TCEQ Enforcement Coordinator: David Carney, Enforcement Division, Enforcement Team 5, MC 149, (512) 239-2583; Candy Garrett, Enforcement Division, MC 219, (512) 239-1456

TCEQ SEP Coordinator: Stuart Beckley, SEP Coordinator, Enforcement Division, MC 219, (512) 239-3565

Respondent: Robin K. Prokop, Plant Manager, MEMC Pasadena, Inc., 3000 North South Street, Pasadena, Texas 77503

Robert Williams, Environmental Safety and Health Manager, MEMC Pasadena, Inc., 3000 North South Street, Pasadena, Texas 77503

Respondent's Attorney: N/A

Attachment A
Docket Number: 2013-1858-AIR-E
SUPPLEMENTAL ENVIRONMENTAL PROJECT

Respondent:	MEMC Pasadena, Inc.
Penalty Amount:	One Hundred Twenty-Six Thousand Five Hundred Sixty Dollars (\$126,560)
SEP Offset Amount:	Sixty-Three Thousand Two Hundred Eighty Dollars (\$63,280)
Type of SEP:	Contribution to a Third-Party Pre-Approved SEP
Third-Party Administrator:	Houston-Galveston Area Council-AERCO ("AERCO")
Project Name:	<i>Clean Vehicles Partnership Project</i>
<u>Location of SEP:</u> Angelina, Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Hardin, Harris, Houston, Jasper, Jefferson, Liberty, Matagorda, Montgomery, Nacogdoches, Newton, Orange, Polk, Sabine, San Augustine, San Jacinto, Trinity, Tyler, Walker, Waller, and Wharton Counties	

The Texas Commission on Environmental Quality ("TCEQ") agrees to offset a portion of the administrative penalty amount assessed in this Agreed Order for the Respondent to contribute to a Supplemental Environmental Project ("SEP"). The offset is equal to the SEP Offset Amount set forth above and is conditioned upon completion of the project in accordance with the terms of this Attachment A.

1. Project Description

a. Project

The Respondent shall contribute the SEP Offset Amount to the Third-Party Administrator named above. The contribution will be to the **Houston-Galveston Area Council-AERCO** for the *Clean Vehicles Partnership Project*. The contribution will be used in accordance with the SEP between the Third-Party Administrator and the TCEQ (the "Project"). Specifically, the SEP Offset Amount will be used to replace old, higher emission buses that do not meet 2010 Environmental Protection Agency ("EPA") emissions standards ("Old Buses") with new, lower emission buses that meet the most recent EPA emissions standards ("New Buses") or to retrofit or convert Old Buses with emissions reducing equipment. The Third-Party Administrator shall allocate the SEP Offset Amount to public entities such as school districts, local governments, and public transit authorities ("SEP Administrators") that apply for replacement, retrofit, or conversion of buses.

The SEP Offset Amount may also be used for retrofit or conversion technology that brings an Old Bus up to current EPA emissions standards. New Buses may be

alternative-fueled. The SEP Offset Amount may be used for up to 100% of the replacement, conversion, or retrofit cost. The SEP Offset Amount will be used only for purchase of New Buses or conversion or retrofit equipment and contract labor for installation of equipment. The SEP Offset Amount will not be used for financing such a purchase through a lease-purchase or similar agreement.

Retrofitting means reducing exhaust emissions to current standards by installing devices that are verified or certified by the EPA or the California Air Resources Board as proven retrofit technologies. Converting means replacing an engine system with an alternative fuel engine system to bring the Old Bus within the current EPA emissions standards. Buses to be replaced, retrofitted, or converted must be in regular use (driven at least five hundred miles per year for at least the past two years) by the SEP Administrator and must not already be scheduled for replacement in the following twenty-four months. All replaced buses must be fully decommissioned. The Third-Party Administrator shall provide proof of decommissioning to TCEQ for each replaced vehicle by submitting a copy of the TCEQ SEP Vehicle Replacement Disposition Form. The SEP will be done in accordance with all federal, state, and local environmental laws and regulations.

All dollars contributed will be used solely for the direct cost of implementing the Project, including, but not limited to supplies, materials, and equipment. Any portion of this contribution that is not spent on the specifically identified SEP may, at the discretion of the Executive Director ("ED"), be applied to another pre-approved SEP.

The Respondent's signature affixed to this Agreed Order certifies that the Respondent has no prior commitment to make this contribution and that it is being contributed solely in an effort to settle this enforcement action. The Respondent shall not profit in any manner from this SEP.

b. Environmental Benefit

This SEP will directly benefit air quality by reducing harmful exhaust emissions that contribute to the formation of ozone and may cause or exacerbate a number of respiratory diseases, including asthma. For example, by replacing a 1989 diesel bus with a 2010 ultra-low emission model, passengers' exposure to nitrogen oxides may be reduced by 98 percent; volatile organic compounds by 93 percent; carbon dioxide by 83 percent; and particulate matter by 99 percent. In addition, by encouraging less bus idling, this SEP contributes to public awareness of air pollution and air quality.

c. Minimum Expenditure

The Respondent shall contribute at least the SEP Offset Amount to the Third-Party Administrator and comply with all other provisions of this SEP.

2. Performance Schedule

Within 30 days after the effective date of this Agreed Order, the Respondent must contribute the SEP Offset Amount to the Third-Party Administrator. The Respondent shall make the check payable to **Houston-Galveston Area Council-AERCO SEP** and shall mail the contribution with a copy of the Agreed Order to:

Houston-Galveston Area Council-AERCO
P.O. Box 22777
Houston, Texas 77227-2777

3. Records and Reporting

Concurrent with the payment of the SEP Offset Amount, Respondent shall provide the Enforcement SEP Coordinator with a copy of the check and transmittal letter indicating full payment of the SEP Offset Amount to the Third-Party Administrator. The Respondent shall mail a copy of the check and transmittal letter to:

Texas Commission on Environmental Quality
Enforcement Division
Attention: SEP Coordinator, MC 219
P.O. Box 13087
Austin, Texas 78711-3087

4. Failure to Fully Perform

If the Respondent does not perform its obligations under this Attachment A, including full expenditure of the SEP Offset Amount and submittal of the required reporting described in Sections 2 and 3 above, the ED may require immediate payment of all or part of the SEP Offset Amount.

In the event the ED determines that the Respondent failed to fully implement and complete the Project, the Respondent shall remit payment for all or a portion of the SEP Offset Amount, as determined by the ED, and as set forth in the attached Agreed Order. After receiving notice of failure to complete the SEP, the Respondent shall include the docket number of the attached Agreed Order and a note that the enclosed payment is for the reimbursement of a SEP; shall make the check payable to "Texas Commission on Environmental Quality;" and shall mail it to:

MEMC Pasadena, Inc.
Agreed Order - Attachment A

Texas Commission on Environmental Quality
Litigation Division
Attention: SEP Coordinator, MC 175
P.O. Box 13087
Austin, Texas 78711-3087

5. Publicity

Any public statements concerning this SEP and/or project, made by or on behalf of the Respondent must include a clear statement that **the Project was performed as part of the settlement of an enforcement action brought by the TCEQ**. Such statements include advertising, public relations, and press releases.

6. Clean Texas Program

The Respondent shall not include this SEP in any application made to TCEQ under the "Clean Texas" (or any successor) program(s). Similarly, the Respondent may not seek recognition for this contribution in any other state or federal regulatory program.

7. Other SEPs by TCEQ or Other Agencies

The SEP Offset Amount identified in this Attachment A and in the attached Agreed Order has not been, and shall not be, included as a SEP for the Respondent under any other Agreed Order negotiated with the TCEQ or any other agency of the state or federal government.



Penalty Calculation Worksheet (PCW)

Policy Revision 2 (September 2002)

PCW Revision October 30, 2008

TCEQ

DATES	Assigned	3-Sep-2013	Screening	10-Sep-2013	EPA Due	23-May-2014
	PCW	25-Jul-2014				

RESPONDENT/FACILITY INFORMATION

Respondent	MEMC Pasadena, Inc.		
Reg. Ent. Ref. No.	RN101062099		
Facility/Site Region	12-Houston	Major/Minor Source	Major

CASE INFORMATION

Enf./Case ID No.	47764	No. of Violations	4
Docket No.	2013-1858-AIR-E	Order Type	1660
Media Program(s)	Air	Government/Non-Profit	No
Multi-Media		Enf. Coordinator	David Carney
		EC's Team	Enforcement Team 5
Admin. Penalty \$ Limit Minimum	\$0	Maximum	\$10,000

Penalty Calculation Section

TOTAL BASE PENALTY (Sum of violation base penalties)	Subtotal 1	\$85,000
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ADJUSTMENTS (+/-) TO SUBTOTAL 1

Subtotals 2-7 are obtained by multiplying the Total Base Penalty (Subtotal 1) by the indicated percentage.

Compliance History	92.0% Enhancement	Subtotals 2, 3, & 7	\$78,200
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Notes
Enhancement for one NOV with same/similar violations, two orders with denial of liability, one federal order with denial of liability, and one final judgment with denial of liability. Reduction for one notice of intent to conduct an audit and one disclosure of violations.

Culpability	No	0.0% Enhancement	Subtotal 4	\$0
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Notes
The Respondent does not meet the culpability criteria.

Good Faith Effort to Comply Total Adjustments	Subtotal 5	\$5,000
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Economic Benefit	0.0% Enhancement*	Subtotal 6	\$0
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Total EB Amounts \$9,973
Approx. Cost of Compliance \$56,000
*Capped at the Total EB \$ Amount

SUM OF SUBTOTALS 1-7	Final Subtotal	\$158,200
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OTHER FACTORS AS JUSTICE MAY REQUIRE	0.0%	Adjustment	\$0
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Reduces or enhances the Final Subtotal by the indicated percentage.

Notes

Final Penalty Amount	\$158,200
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STATUTORY LIMIT ADJUSTMENT	Final Assessed Penalty	\$158,200
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DEFERRAL	20.0% Reduction	Adjustment	-\$31,640
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Reduces the Final Assessed Penalty by the indicated percentage. (Enter number only; e.g. 20 for 20% reduction.)

Notes

Deferral offered for expedited settlement.

PAYABLE PENALTY	\$126,560
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Screening Date 10-Sep-2013

Docket No. 2013-1858-AIR-E

PCW

Respondent MEMC Pasadena, Inc.

Policy Revision 2 (September 2002)

Case ID No. 47764

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN101062099

Media [Statute] Air

Enf. Coordinator David Carney

Compliance History Worksheet

>> Compliance History Site Enhancement (Subtotal 2)

Component	Number of...	Enter Number Here	Adjust.
NOVs	Written notices of violation ("NOVs") with same or similar violations as those in the current enforcement action (<i>number of NOVs meeting criteria</i>)	1	5%
	Other written NOVs	0	0%
Orders	Any agreed final enforcement orders containing a denial of liability (<i>number of orders meeting criteria</i>)	3	60%
	Any adjudicated final enforcement orders, agreed final enforcement orders without a denial of liability, or default orders of this state or the federal government, or any final prohibitory emergency orders issued by the commission	0	0%
Judgments and Consent Decrees	Any non-adjudicated final court judgments or consent decrees containing a denial of liability of this state or the federal government (<i>number of judgements or consent decrees meeting criteria</i>)	1	30%
	Any adjudicated final court judgments and default judgments, or non-adjudicated final court judgments or consent decrees without a denial of liability, of this state or the federal government	0	0%
Convictions	Any criminal convictions of this state or the federal government (<i>number of counts</i>)	0	0%
Emissions	Chronic excessive emissions events (<i>number of events</i>)	0	0%
Audits	Letters notifying the executive director of an intended audit conducted under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (<i>number of audits for which notices were submitted</i>)	1	-1%
	Disclosures of violations under the Texas Environmental, Health, and Safety Audit Privilege Act, 74th Legislature, 1995 (<i>number of audits for which violations were disclosed</i>)	1	-2%
Please Enter Yes or No			
Other	Environmental management systems in place for one year or more	No	0%
	Voluntary on-site compliance assessments conducted by the executive director under a special assistance program	No	0%
	Participation in a voluntary pollution reduction program	No	0%
	Early compliance with, or offer of a product that meets future state or federal government environmental requirements	No	0%

Adjustment Percentage (Subtotal 2) 92%

>> Repeat Violator (Subtotal 3)

No

Adjustment Percentage (Subtotal 3) 0%

>> Compliance History Person Classification (Subtotal 7)

Satisfactory Performer

Adjustment Percentage (Subtotal 7) 0%

>> Compliance History Summary

Compliance History Notes

Enhancement for one NOV with same/similar violations, two orders with denial of liability, one federal order with denial of liability, and one final judgment with denial of liability. Reduction for one notice of intent to conduct an audit and one disclosure of violations.

Total Adjustment Percentage (Subtotals 2, 3, & 7) 92%

Screening Date 10-Sep-2013

Docket No. 2013-1858-AIR-E

PCW

Respondent MEMC Pasadena, Inc.

Policy Revision 2 (September 2002)

Case ID No. 47764

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN101062099

Media [Statute] Air

Enf. Coordinator David Carney

Violation Number 1

Rule Cite(s)

30 Tex. Admin. Code §§ 116.115(c) and 122.143(4), Federal Operating Permit ("FOP") No. 01412, Special Terms and Conditions ("STC") Nos. 7(a)(i) and 11, Air Permit No. 9597, Special Conditions ("SC") No. 1, and Tex. Health & Safety Code § 382.085(b)

Violation Description

Failed to comply with permitted emission rates. Specifically, during a stack test conducted on February 18, 2011 it was determined that the nitrogen oxides ("NOx") emission rate was 0.31 pound per hour ("lb/hr") for Emissions Point Number ("EPN") Y-C-201 and 0.59 lb/hr for EPN Y-C-301, exceeding the permitted emission rates of 0.23 lb/hr, resulting in the release of approximately 9,873.6 lbs of unauthorized NOx emissions.

Base Penalty \$10,000

>> Environmental, Property and Human Health Matrix

OR

	Harm		
Release	Major	Moderate	Minor
Actual			X
Potential			

Percent 25%

>> Programmatic Matrix

	Major	Moderate	Minor
Falsification			

Percent 0%

Matrix Notes

Human health or the environment has been exposed to insignificant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment \$7,500

\$2,500

Violation Events

Number of Violation Events 11

935 Number of violation days

mark only one with an x	daily	
	weekly	
	monthly	
	quarterly	X
	semiannual	
	annual	
	Single event	

Violation Base Penalty \$27,500

Eleven quarterly events are recommended from the stack test date of February 18, 2011 to the screening date of September 10, 2013.

Good Faith Efforts to Comply

0.0% Reduction

\$0

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary		
N/A	X	(mark with x)

Notes

The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal \$27,500

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$3,362

Violation Final Penalty Total \$52,800

This violation Final Assessed Penalty (adjusted for limits) \$52,800

Economic Benefit Worksheet

Respondent MEMC Pasadena, Inc.
Case ID No. 47764
Reg. Ent. Reference No. RN101062099
Media Air
Violation No. 1

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
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No commas or \$

Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$20,000	18-Feb-2011	29-Jun-2014	3.36	\$3,362	n/a	\$3,362

Notes for DELAYED costs

Estimated cost to implement measures and/or procedures to ensure compliance with permitted emission rates for EPNs Y-C-201 and Y-C-301. The Date Required is the date of the documented non-compliance. The Final Date is the estimated date of compliance.

Avoided Costs

ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

Notes for AVOIDED costs

Approx. Cost of Compliance

\$20,000

TOTAL

\$3,362

Screening Date 10-Sep-2013

Docket No. 2013-1858-AIR-E

PCW

Respondent MEMC Pasadena, Inc.

Policy Revision 2 (September 2002)

Case ID No. 47764

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN101062099

Media [Statute] Air

Enf. Coordinator David Carney

Violation Number 2

Rule Cite(s) 30 Tex. Admin. Code §§ 116.115(c) and 116.116(a), Air Permit No. 9597, SC No. 1, and Tex. Health & Safety Code § and 382.085(b)

Violation Description

Failed to comply with the representations with regard to construction plans and operation procedures in an application for a permit. Specifically, on August 10, 2010, the emissions from Vent VP-9840/VP-9841 were authorized to be routed to EPN Y-E-7 and the emissions from Oil Scrubbers D-9104/D-91104 were authorized to be routed to EPN Y-E-2, but the Respondent began routing the emissions from Vent VP-9840/VP-9841 to EPNs Y-E-7 and Y-E-7B on January 4, 2011 and began routing the emissions from Oil Scrubbers D-9104/D-91104 to EPNs Y-E-2 and Y-E-2B on April 15, 2011, resulting in approximately 50 pounds ("lbs") of unauthorized particulate matter ("PM") emissions, 50 lbs of unauthorized PM equal to or less than 10 microns in diameter emissions, and 306.4 lbs of unauthorized volatile organic compounds ("VOC") emissions.

Base Penalty \$10,000

>> Environmental, Property and Human Health Matrix

OR

	Major	Harm Moderate	Minor
Release Actual			X
Potential			

Percent 25%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0%

Matrix
Notes

Human health or the environment has been exposed to insignificant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment \$7,500

\$2,500

Violation Events

Number of Violation Events 8

675 Number of violation days

mark only one
with an x

daily	
weekly	
monthly	
quarterly	X
semiannual	
annual	
single event	

Violation Base Penalty \$20,000

Eight quarterly events are recommended from the non-compliance date of January 4, 2011 to the compliance date of November 9, 2012.

Good Faith Efforts to Comply

25.0% Reduction

\$5,000

	Before NOV	NOV to EDPRP/Settlement Offer
Extraordinary		
Ordinary	X	
N/A		(mark with x)

Notes

The Respondent completed the corrective actions on November 9, 2012, prior to the August 26, 2013 Notice of Enforcement.

Violation Subtotal \$15,000

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$572

Violation Final Penalty Total \$33,400

This violation Final Assessed Penalty (adjusted for limits) \$33,400

Economic Benefit Worksheet

Respondent MEMC Pasadena, Inc.
Case ID No. 47764
Reg. Ent. Reference No. RN101062099
Media Air
Violation No. 2

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Overtime Costs	EB Amount
No commas or \$							

Delayed Costs

Equipment	\$1,000	15-Apr-2011	9-Nov-2012	1.57	\$5	\$105	\$110
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs	\$5,000	4-Jan-2011	9-Nov-2012	1.85	\$462	n/a	\$462
Other (as needed)				0.00	\$0	n/a	\$0

Notes for DELAYED costs

Estimated cost to obtain a permit amendment for all emission points and estimated cost to reconsolidate EPNs Y-E-2 and Y-E-2B to EPN Y-E-2. The Dates Required are the dates of the documented non-compliance. The Final Dates are the date that corrective actions were completed.

Avoided Costs

ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

Notes for AVOIDED costs

Approx. Cost of Compliance

\$6,000

TOTAL

\$572

Screening Date 10-Sep-2013

Docket No. 2013-1858-AIR-E

PCW

Respondent MEMC Pasadena, Inc.

Policy Revision 2 (September 2002)

Case ID No. 47764

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN101062099

Media [Statute] Air

Enf. Coordinator David Carney

Violation Number 3

Rule Cite(s)

30 Tex. Admin. Code § 122.221(a)(2) and Tex. Health & Safety Code §§ 382.054 and 382.085(b)

Violation Description

Failed to authorize all emission points. Specifically, Vent VP-9840/VP-9841, EPN Y-E-7, was routed to EPNs Y-E-7 and Y-E-7B on January 4, 2011 and Oil Scrubber D-9104/D-91104, EPN Y-E-2, was routed to EPNs Y-E-2 and Y-E-2B on April 15, 2011 and put into service prior to obtaining a FOP revision.

Base Penalty \$10,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			
Potential			

Percent 0%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor
	x		

Percent 25%

Matrix Notes

100% of the rule requirement was not met.

Adjustment \$7,500

\$2,500

Violation Events

Number of Violation Events 1

980 Number of violation days

mark only one
with an x

daily	
weekly	
monthly	
quarterly	
semiannual	
annual	
single event	x

Violation Base Penalty \$2,500

One single event is recommended for not obtaining a FOP revision.

Good Faith Efforts to Comply

0.0% Reduction

\$0

Before NOV NOV to EDPRP/Settlement Offer

Extraordinary		
Ordinary		
N/A	x	(mark with x)

Notes

The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal \$2,500

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$871

Violation Final Penalty Total \$4,800

This violation Final Assessed Penalty (adjusted for limits) \$4,800

Economic Benefit Worksheet

Respondent MEMC Pasadena, Inc.

Case ID No. 47764

Reg. Ent. Reference No. RN101062099

Media Air

Violation No. 3

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
No commas or \$							

Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs	\$5,000	4-Jan-2011	29-Jun-2014	3.48	\$871	n/a	\$871
Other (as needed)				0.00	\$0	n/a	\$0

Notes for DELAYED costs

Estimated cost to obtain FOP authorization for all emission points. The Date Required is the date of the documented non-compliance. The Final Date is the estimated date of compliance.

Avoided Costs

ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

Notes for AVOIDED costs

Approx. Cost of Compliance

\$5,000

TOTAL

\$871

Screening Date 10-Sep-2013

Docket No. 2013-1858-AIR-E

PCW

Respondent MEMC Pasadena, Inc.

Policy Revision 2 (September 2002)

Case ID No. 47764

PCW Revision October 30, 2008

Reg. Ent. Reference No. RN101062099

Media [Statute] Air

Enf. Coordinator David Carney

Violation Number 4

Rule Cite(s)

30 Tex. Admin. Code §§ 116.115(c) and 122.143(4), FOP No. 01412, STC No.11, Air Permit No. 9597, SC No. 1, and Tex. Health & Safety Code § 382.085(b)

Violation Description

Failed to comply with the permitted emission rates. Specifically, during stack tests conducted on May 12, 2010 for EPN Y-D-204 and on August 4, 2010 for EPN Y-D-4, it was determined that the emissions rate of silane-containing VOC from the LUWA Scrubber R-94150, EPN Y-D-4, was 2.91 lbs/hr and from the LUWA Scrubber R-94250, EPN Y-D-204, was 4.15 lbs/hr, exceeding the permitted emissions rates of 0.63 lb/hr, resulting in total unauthorized emissions of silane-containing VOC of approximately 169,406.4 lbs.

Base Penalty \$10,000

>> Environmental, Property and Human Health Matrix

OR

Release	Harm		
	Major	Moderate	Minor
Actual			X
Potential			

Percent 25%

>> Programmatic Matrix

Falsification	Major	Moderate	Minor

Percent 0%

Matrix Notes

Human health or the environment has been exposed to insignificant amounts of pollutants which do not exceed levels that are protective of human health or environmental receptors as a result of the violation.

Adjustment \$7,500

\$2,500

Violation Events

Number of Violation Events 14

1217 Number of violation days

mark only one with an x	daily	
	weekly	
	monthly	
	quarterly	X
	semiannual	
	annual	
	single event	

Violation Base Penalty \$35,000

Fourteen quarterly events are recommended from the stack test date of May 12, 2010 to the screening date of September 10, 2013.

Good Faith Efforts to Comply

0.0% Reduction

\$0

Before NOV NOV to EDPRP/Settlement Offer

Extraordinary		
Ordinary		
N/A	X	(mark with x)

Notes

The Respondent does not meet the good faith criteria for this violation.

Violation Subtotal \$35,000

Economic Benefit (EB) for this violation

Statutory Limit Test

Estimated EB Amount \$5,168

Violation Final Penalty Total \$67,200

This violation Final Assessed Penalty (adjusted for limits) \$67,200

Economic Benefit Worksheet

Respondent MEMC Pasadena, Inc.
Case ID No. 47764
Reg. Ent. Reference No. RN101062099
Media Air
Violation No. 4

Percent Interest	Years of Depreciation
5.0	15

Item Description	Item Cost	Date Required	Final Date	Yrs	Interest Saved	Onetime Costs	EB Amount
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No commas or \$

Delayed Costs

Equipment				0.00	\$0	\$0	\$0
Buildings				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0
Engineering/construction				0.00	\$0	\$0	\$0
Land				0.00	\$0	n/a	\$0
Record Keeping System				0.00	\$0	n/a	\$0
Training/Sampling				0.00	\$0	n/a	\$0
Remediation/Disposal				0.00	\$0	n/a	\$0
Permit Costs				0.00	\$0	n/a	\$0
Other (as needed)	\$25,000	12-May-2010	29-Jun-2014	4.13	\$5,168	n/a	\$5,168

Notes for DELAYED costs

Estimated cost to implement measures designed to comply with the permitted emission rates for the LUWA Scrubbers. The Date Required is the date of the documented non-compliance. The Final Date is the estimated date of compliance.

Avoided Costs

ANNUALIZE [1] avoided costs before entering item (except for one-time avoided costs)

Disposal				0.00	\$0	\$0	\$0
Personnel				0.00	\$0	\$0	\$0
Inspection/Reporting/Sampling				0.00	\$0	\$0	\$0
Supplies/equipment				0.00	\$0	\$0	\$0
Financial Assurance [2]				0.00	\$0	\$0	\$0
ONE-TIME avoided costs [3]				0.00	\$0	\$0	\$0
Other (as needed)				0.00	\$0	\$0	\$0

Notes for AVOIDED costs

Approx. Cost of Compliance	\$25,000	TOTAL	\$5,168
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Compliance History Report

PUBLISHED Compliance History Report for CN600619415, RN101062099, Rating Year 2013 which includes Compliance History (CH) components from September 1, 2008, through August 31, 2013.

Customer, Respondent, or Owner/Operator: CN600619415, MEMC Pasadena, Inc.

Classification: SATISFACTORY

Rating: 13.33

Regulated Entity: RN101062099, MEMC Pasadena

Classification: SATISFACTORY

Rating: 13.33

Complexity Points: 11

Repeat Violator: NO

CH Group: 05 - Chemical Manufacturing

Location: 3000 NORTH SOUTH STREET, PASADENA, TEXAS 77503, HARRIS COUNTY

TCEQ Region: REGION 12 - HOUSTON

ID Number(s):

AIR OPERATING PERMITS PERMIT 1412

AIR OPERATING PERMITS ACCOUNT NUMBER HX0029W

AIR NEW SOURCE PERMITS PERMIT 9597

AIR NEW SOURCE PERMITS ACCOUNT NUMBER HX0029W

AIR NEW SOURCE PERMITS REGISTRATION 55246

AIR NEW SOURCE PERMITS AFS NUM 4820101473

AIR NEW SOURCE PERMITS REGISTRATION 95822

AIR NEW SOURCE PERMITS REGISTRATION 106728

AIR NEW SOURCE PERMITS REGISTRATION 109342

AIR NEW SOURCE PERMITS REGISTRATION 119121

AIR NEW SOURCE PERMITS REGISTRATION 119591

INDUSTRIAL AND HAZARDOUS WASTE EPA ID

TXR000007088

INDUSTRIAL AND HAZARDOUS WASTE SOLID WASTE
REGISTRATION # (SWR) 84039

AIR EMISSIONS INVENTORY ACCOUNT NUMBER HX0029W

POLLUTION PREVENTION PLANNING ID NUMBER P03066

Compliance History Period: September 01, 2008 to August 31, 2013

Rating Year: 2013

Rating Date: 09/01/2013

Date Compliance History Report Prepared: June 27, 2014

Agency Decision Requiring Compliance History: Enforcement

Component Period Selected: May 05, 2009 to May 05, 2014

TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.

Name: David Carney

Phone: (512) 239-2583

Site and Owner/Operator History:

- 1) Has the site been in existence and/or operation for the full five year compliance period? YES
- 2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
- 3) If **YES** for #2, who is the current owner/operator? N/A
- 4) If **YES** for #2, who was/were the prior owner(s)/operator(s)? N/A
- 5) If **YES**, when did the change(s) in owner or operator occur? N/A

Components (Multimedia) for the Site Are Listed in Sections A - J

A. Final Orders, court judgments, and consent decrees:

1 Effective Date: 12/21/2009 COURTORDER (Final Judgement-Agreed Order With Denial)

Classification: Minor

Citation: 30 TAC Chapter 101, SubChapter A 101.4

30 TAC Chapter 101, SubChapter F 101.201(b)(2)(F)

30 TAC Chapter 101, SubChapter F 101.201(b)(2)(G)

30 TAC Chapter 101, SubChapter F 101.201(b)(2)(H)

5C THSC Chapter 382 382.002

Description: On September 8, 2008, a Violation Notice for violations of 30 TAC Code 101.04 and 101.201(b)(2)(F), (G) and (H) because it was determined that defendant caused a nuisance condition caused by particular matter generated from

two non-reportable emission events at Defendant's manufacturing plant that occurred on or about July 2, 2008. It was additionally determined that Defendant failed to keep proper records of the incidents as required by TAC101.201(b)(2)et seq.

- 2 Effective Date: 02/05/2011 ADMINORDER 2010-1078-AIR-E (1660 Order-Agreed Order With Denial)
Classification: Minor
Citation: 30 TAC Chapter 101, SubChapter F 101.201(a)(1)(B)
30 TAC Chapter 101, SubChapter F 101.201(b)(1)(H)
5C THSC Chapter 382 382.085(b)
Description: Failed to properly report Incident No. 137503. Specifically, the emissions event was discovered at 2:45 p.m. on March 24, 2010, but was not reported until 3:25 p.m. on March 25, 2010, and the permit number governing the facilities involved in the emissions event was not provided in the final record.
Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
5C THSC Chapter 382 382.085(b)
Rqmt Prov: Special Condition 1 PERMIT
Special Condition 6 PERMIT
Description: Failed to prevent an unauthorized emissions. Specifically, the Respondent released 1,959 pounds of silica which resulted in 30% opacity from the Inorganic Flare in the PA-21 Process Unit during an emissions event that began on March 24, 2010 and lasted 36 minutes (Incident No. 137503) when Storage Tank D-9344 was overfilled during a silane transfer, causing the relief valve to lift.
- 3 Effective Date: 08/26/2013 ADMINORDER 2012-2036-AIR-E (1660 Order-Agreed Order With Denial)
Classification: Moderate
Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
Rqmt Prov: Special Condition 1 PERMIT
Description: Failed to prevent unauthorized emissions during incident Incident No. 166969. [Subcategory A.12(i)(6)]
Classification: Moderate
Citation: 30 TAC Chapter 122, SubChapter B 122.143(4)
30 TAC Chapter 122, SubChapter B 122.146(2)
5C THSC Chapter 382 382.085(b)
Rqmt Prov: General Terms and Conditions OP
Description: Failure to submit Permit Compliance Certification (PCC) within 30 days of the end of the certification period. (Category A8)

See addendum for information regarding federal actions.

B. Criminal convictions:

N/A

C. Chronic excessive emissions events:

N/A

D. The approval dates of investigations (CCEDS Inv. Track. No.):

Item 1	May 12, 2009	(745311)
Item 2	September 08, 2010	(829437)
Item 3	September 21, 2010	(841831)
Item 4	November 19, 2010	(873741)
Item 5	March 01, 2011	(900873)
Item 6	July 05, 2011	(924142)
Item 7	October 24, 2011	(951206)
Item 8	October 15, 2012	(1036759)
Item 9	December 21, 2012	(1044344)
Item 10	October 21, 2013	(1124416)
Item 11	October 31, 2013	(1123641)

E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

1	Date: 02/28/2014 (1123139)	CN600619415
	Self Report? NO	Classification: Moderate

Published Compliance History Report for CN600619415, RN101062099, Rating Year 2013 which includes Compliance History (CH) components from May 05, 2009, through May 05, 2014.

Citation: 30 TAC Chapter 116, SubChapter B 116.115(c)
30 TAC Chapter 122, SubChapter B 122.143(4)
5C THSC Chapter 382 382.085(b)
SC No. 1 PERMIT
STC No. 1A and 11 OP
Description: Failure to prevent an opacity event on July 26, 2012; March 4, 2013, March 21, 2013;
April 12, 2013; and June 27, 2013 from Baghouse B-9460 (EPN Y-E-5). (Category C1
Violation)

F. Environmental audits:

Notice of Intent Date: 08/12/2010 (850871)

Disclosure Date: 02/01/2011

Viol. Classification: Minor

Citation: 40 CFR Chapter 265, SubChapter I, PT 265, SubPT I 265.173

30 TAC Chapter 335, SubChapter A 335.2

30 TAC Chapter 335, SubChapter C 335.69

30 TAC Chapter 335, SubChapter C 335.69(a)(1)(A)

30 TAC Chapter 335, SubChapter C 335.69(a)(2)

30 TAC Chapter 335, SubChapter C 335.69(a)(3)

Description: Failed to level hazardous waste drums properly, failed to close three drums during storage, failed to label one drum, and also had one drum on site past the 90 day storage time limit.

Viol. Classification: Minor

Citation: 30 TAC Chapter 335, SubChapter A 335.13

30 TAC Chapter 335, SubChapter A 335.13(j)

30 TAC Chapter 335, SubChapter A 335.13(k)

Description: Failed to include the "Designated Facility to Generator" copy of the manifest as part of the record to show that the hazardous shipment had been received by the treatment, storage, and disposal facility on many waste manifests prior to April 2008.

Disclosure Date: 06/24/2011

Viol. Classification: Minor

Citation: 40 CFR Chapter 265, SubChapter I, PT 265, SubPT I 265.173

30 TAC Chapter 335, SubChapter A 335.2

30 TAC Chapter 335, SubChapter C 335.69

30 TAC Chapter 335, SubChapter C 335.69(a)(1)(A)

30 TAC Chapter 335, SubChapter C 335.69(a)(2)

30 TAC Chapter 335, SubChapter C 335.69(a)(3)

Description: Failed to level hazardous waste drums properly, failed to close three drums during storage, failed to label one drum, and also had one drum on site past the 90 day storage time limit.

Viol. Classification: Minor

Citation: 30 TAC Chapter 335, SubChapter A 335.13

30 TAC Chapter 335, SubChapter A 335.13(j)

30 TAC Chapter 335, SubChapter A 335.13(k)

Description: Failed to include the "Designated Facility to Generator" copy of the manifest as part of the record to show that the hazardous shipment had been received by the treatment, storage, and disposal facility on many waste manifests prior to April 2008.

G. Type of environmental management systems (EMSs):

N/A

H. Voluntary on-site compliance assessment dates:

N/A

I. Participation in a voluntary pollution reduction program:

N/A

J. Early compliance:

N/A

Sites Outside of Texas:

N/A

Addendum to Compliance History Federal Enforcement Actions

Reg Entity Name: MEMC PASADENA INC

Reg Entity Add: 3000 NORTH SOUTH STREET

Reg Entity City: PASADENA

Reg Entity No: RN101062099

Customer Name: MEMC Pasadena, Inc.

Customer No: CN600619415

EPA Case No: 06-2011-0958

Order Issue Date (yyyymmdd): 20120925

Case Result:

Statute: RCRA

Sect of Statute: 3008A

Classification: Minor

Program: Solid Waste Management -

Citation:

Violation Type:

Cite Sect: Subtitle C - Generator

Cite Part:

Enforcement Action: Administrative Penalty Order With or Without Injunctive Relief

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



**IN THE MATTER OF AN
ENFORCEMENT ACTION
CONCERNING
MEMC PASADENA, INC.
RN101062099**

**§ BEFORE THE
§
§ TEXAS COMMISSION ON
§
§ ENVIRONMENTAL QUALITY**

AGREED ORDER DOCKET NO. 2013-1858-AIR-E

I. JURISDICTION AND STIPULATIONS

On _____, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding MEMC Pasadena, Inc. ("Respondent") under the authority of TEX. HEALTH & SAFETY CODE ch. 382 and TEX. WATER CODE ch. 7. The Executive Director of the TCEQ, through the Enforcement Division, and the Respondent together stipulate that:

1. The Respondent owns and operates a polysilicon manufacturing plant located at 3000 North South Street in Pasadena, Harris County, Texas (the "Plant").
2. The Plant consists of one or more sources as defined in TEX. HEALTH & SAFETY CODE § 382.003(12).
3. The Executive Director and the Respondent agree that the Commission has jurisdiction to enter this Agreed Order, and that the Respondent is subject to the Commission's jurisdiction.
4. The Respondent received notice of the violations alleged in Section II ("Allegations") on or about August 31, 2013.
5. The occurrence of any violation is in dispute and the entry of this Agreed Order shall not constitute an admission by the Respondent of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
6. An administrative penalty in the amount of One Hundred Fifty-Eight Thousand Two Hundred Dollars (\$158,200) is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). The Respondent has paid Sixty-Three Thousand Two Hundred Eighty Dollars (\$63,280) of the administrative penalty and Thirty-One Thousand Six Hundred Forty Dollars (\$31,640) is deferred contingent upon the Respondent's timely and satisfactory compliance with all the terms of this Agreed Order. The deferred amount will be waived upon full compliance with the terms of this

Agreed Order. If the Respondent fails to timely and satisfactorily comply with all requirements of this Agreed Order, the Executive Director may require the Respondent to pay all or part of the deferred penalty. Sixty-Three Thousand Two Hundred Eighty Dollars (\$63,280) shall be conditionally offset by the Respondent's completion of a Supplemental Environmental Project ("SEP").

7. Any notice and procedures, which might otherwise be authorized or required in this action, are waived in the interest of a more timely resolution of the matter.
8. The Executive Director and the Respondent agree on a settlement of the matters alleged in this enforcement action, subject to final approval in accordance with 30 TEX. ADMIN. CODE § 70.10(a).
9. The Executive Director recognizes that the Respondent has implemented the following corrective measures at the Plant:
 - a. On November 9, 2012, reconsolidated Emissions Point Numbers ("EPNs") Y-E-2 and Y-E-2B to EPN Y-E-2 and obtained a permit amendment for Air Permit No. 9597 to address the split of EPN Y-E-7; and
 - b. On February 20, 2014, the Respondent submitted a Federal Operating Permit ("FOP") renewal and revision request in order to obtain FOP authorization for all emission points.
10. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that the Respondent has not complied with one or more of the terms or conditions in this Agreed Order.
11. This Agreed Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Agreed Order, whichever is later.
12. The provisions of this Agreed Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Agreed Order unenforceable, the remaining provisions shall be valid and enforceable.

II. ALLEGATIONS

As owner and operator of the Plant, the Respondent is alleged to have:

1. Failed to comply with permitted emission rates, in violation of 30 TEX. ADMIN. CODE §§ 116.115(c) and 122.143(4), FOP No. 01412, Special Terms and Conditions ("STC") Nos. 7(a)(i) and 11, Air Permit No. 9597, Special Conditions ("SC") No. 1, and TEX. HEALTH & SAFETY CODE § 382.085(b), as documented during a record review conducted on June 17, 2013. Specifically, during a stack test conducted on February 18, 2011, it was determined that the nitrogen oxides ("NOx") emission rate was 0.31 pound per hour ("lb/hr") for EPN Y-C-201 and 0.59 lb/hr for EPN Y-C-301, exceeding the permitted emission rates of 0.23 lb/hr, resulting in the release of approximately 9,873.6 lbs of unauthorized NOx emissions.

2. Failed to comply with the representations with regard to construction plans and operation procedures in an application for a permit, in violation of 30 TEX. ADMIN. CODE §§ 116.115(c) and 116.116(a), Air Permit No. 9597, SC No. 1, and TEX. HEALTH & SAFETY CODE § 382.085(b), as documented during a record review conducted on June 17, 2013. Specifically, on August 10, 2010, the emissions from Vent VP-9840/VP-9841 were authorized to be routed to EPN Y-E-7 and the emissions from Oil Scrubbers D-9104/D-91104 were authorized to be routed to EPN Y-E-2, but the Respondent began routing the emissions from Vent VP-9840/VP-9841 to EPNs Y-E-7 and Y-E-7B on January 4, 2011 and began routing the emissions from Oil Scrubbers D-9104/D-91104 to EPNs Y-E-2 and Y-E-2B on April 15, 2011, resulting in approximately 50 lbs of unauthorized particulate matter ("PM") emissions, 50 lbs of unauthorized PM equal to or less than 10 microns in diameter emissions, and 306.4 lbs of unauthorized volatile organic compounds ("VOC") emissions.
3. Failed to authorize all emission points, in violation of 30 TEX. ADMIN. CODE § 122.221(a)(2) and TEX. HEALTH & SAFETY CODE §§ 382.054 and 382.085(b), as documented during a record review conducted on June 17, 2013. Specifically, Vent VP-9840/VP-9841, EPN Y-E-7, was routed to EPNs Y-E-7 and Y-E-7B on January 4, 2011 and Oil Scrubber D-9104/D-91104, EPN Y-E-2, was routed to EPNs Y-E-2 and Y-E-2B on April 15, 2011 and put into service prior to obtaining a FOP revision.
4. Failed to comply with permitted emission rates, in violation of 30 TEX. ADMIN. CODE §§ 116.115(c) and 122.143(4), FOP No. O1412, STC No.11, Air Permit No. 9597, SC No. 1, and TEX. HEALTH & SAFETY CODE § 382.085(b), as documented during a record review conducted on June 17, 2013. Specifically, during stack tests conducted on May 12, 2010 for EPN Y-D-204 and on August 4, 2010 for EPN Y-D-4, it was determined that the emissions rate of silane-containing VOC from the LUWA Scrubber R-94150, EPN Y-D-4, was 2.91 lbs/hr and from the LUWA Scrubber R-94250, EPN Y-D-204, was 4.15 lbs/hr, exceeding the permitted emission rates of 0.63 lb/hr, resulting in total unauthorized emissions of silane containing VOC of 169,406.4 lbs.

III. DENIALS

The Respondent generally denies each allegation in Section II ("Allegations").

IV. ORDERING PROVISIONS

1. It is, therefore, ordered by the TCEQ that the Respondent pay an administrative penalty as set forth in Section I, Paragraph 6 above. The payment of this administrative penalty and the Respondent's compliance with all the terms and conditions set forth in this Agreed Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations which are not raised here. Administrative penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: MEMC Pasadena, Inc., Docket No. 2013-1858-AIR-E" to:

Financial Administration Division, Revenue Operations Section
Attention: Cashier's Office, MC 214
Texas Commission on Environmental Quality
P.O. Box 13088
Austin, Texas 78711-3088

2. The Respondent shall implement and complete a SEP in accordance with TEX. WATER CODE § 7.067. As set forth in Section I, Paragraph 6 above, Sixty-Three Thousand Two Hundred Eighty Dollars (\$63,280) of the assessed administrative penalty shall be offset with the condition that the SEP defined in Attachment A, incorporated herein by reference, is implemented by the Respondent. The Respondent's obligation to pay the conditionally offset portion of the administrative penalty assessed shall be discharged upon final completion of all provisions of the SEP agreement.
3. It is further ordered that the Respondent shall undertake the following technical requirements:
 - a. Within 30 days after the effective date of this Agreed Order:
 - i. Implement measures and/or procedures to ensure compliance with permitted emission rates for EPN Y-C-201; and
 - ii. Commence an engineering study to determine whether compliance with permitted emission rates for EPNs Y-D-4 and Y-D-204 are expected to be most practically achieved by obtaining a permit amendment that will increase the maximum allowable emissions rates, by installing pollution control equipment, or by some combination thereof.
 - b. Within 45 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision No. 3.k. below to demonstrate compliance with Ordering Provision Nos. 3.a.i. and 3.a.ii.;
 - c. Within 60 days after the effective date of this Agreed Order, implement measures and/or procedures to ensure compliance with the permitted emission rates for EPN Y-C-301;
 - d. Within 75 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision No. 3.k. below to demonstrate compliance with Ordering Provision No. 3.c.;
 - e. Within 90 days after the effective date of this Agreed Order, complete the engineering study outlined in Ordering Provision No. 3.a.ii.;
 - f. Within 105 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision No. 3.k. below to demonstrate compliance with Ordering Provision No. 3.e.;
 - g. Within 180 days after the effective date of this Agreed Order:
 - i. Implement measures and/or procedures to ensure compliance with permitted emission rates for EPNs Y-D-4 and/or Y-D-204; or
 - ii. Submit a permit amendment application to increase the permitted emission rates of EPNs Y-D-4 and/or Y-D-204, in accordance with 30 TEX. ADMIN. CODE § 116.111, to:

Air Permits Division, MC 163
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

- h. Within 195 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision No. 3.k. below to demonstrate compliance with Ordering Provision Nos. 3.g.i. and/or 3.g.ii.;
- i. For the FOP renewal and revision request filed on February 20, 2014 and if any permit application is submitted for Ordering Provision No. 3.g.ii., then respond completely and adequately, as determined by the TCEQ, to all requests for information concerning the renewal and/or amendment within 30 days after the date of such requests, or by any other deadline specified in writing;
- j. Within 365 days after the effective date of this Agreed Order, submit written certification as described in Ordering Provision No. 3.k. below to demonstrate that the FOP and any applicable New Source Review permit authorization has been obtained for the affected emissions points or operation of the affected emissions points has ceased until such time that a proper authorization is obtained; and
- k. The certifications required by these Ordering Provisions shall be accompanied by detailed supporting documentation including photographs, receipts, and/or other records, and shall be notarized by a State of Texas Notary Public and include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

The certification shall be submitted to:

Order Compliance Team
Enforcement Division, MC 149A
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

with a copy to:

Air Section Manager
Houston Regional Office
Texas Commission on Environmental Quality
5425 Polk Avenue, Suite H
Houston, Texas 77023-1486

4. The provisions of this Agreed Order shall apply to and be binding upon the Respondent. The Respondent is ordered to give notice of the Agreed Order to personnel who maintain day-to-day control over the Plant operations referenced in this Agreed Order.
5. If the Respondent fails to comply with any of the Ordering Provisions in this Agreed Order within the prescribed schedules, and that failure is caused solely by an act of God, war, strike, riot, or other catastrophe, the Respondent's failure to comply is not a violation of this Agreed Order. The Respondent shall have the burden of establishing to the Executive Director's satisfaction that such an event has occurred. The Respondent shall notify the Executive Director within seven days after the Respondent becomes aware of a delaying event and shall take all reasonable measures to mitigate and minimize any delay.
6. The Executive Director may grant an extension of any deadline in this Agreed Order or in any plan, report, or other document submitted pursuant to this Agreed Order, upon a written and substantiated showing of good cause. All requests for extensions by the Respondent shall be made in writing to the Executive Director. Extensions are not effective until the Respondent receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.
7. This Agreed Order, issued by the Commission, shall not be admissible against the Respondent in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Agreed Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
8. This Agreed Order may be executed in separate and multiple counterparts, which together shall constitute a single instrument. Any page of this Agreed Order may be copied, scanned, digitized, converted to electronic portable document format ("pdf"), or otherwise reproduced and may be transmitted by digital or electronic transmission, including but not limited to facsimile transmission and electronic mail. Any signature affixed to this Agreed Order shall constitute an original signature for all purposes and may be used, filed, substituted, or issued for any purpose for which an original signature could be used. The term "signature" shall include manual signatures and true and accurate reproductions of manual signatures created, executed, endorsed, adopted, or authorized by the person or persons to whom the signatures are attributable. Signatures may be copied or reproduced digitally, electronically, by photocopying, engraving, imprinting, lithographing, electronic mail, facsimile transmission, stamping, or any other means or process which the Executive Director deems acceptable. In this paragraph exclusively, the terms "electronic transmission", "owner", "person", "writing", and "written" shall have the meanings assigned to them under TEX. BUS. ORG. CODE § 1.002.
9. Under 30 TEX. ADMIN. CODE § 70.10(b), the effective date is the date of hand-delivery of the Order to the Respondent, or three days after the date on which the Commission mails notice of the Order to the Respondent, whichever is earlier.

SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

For the Commission


For the Executive Director

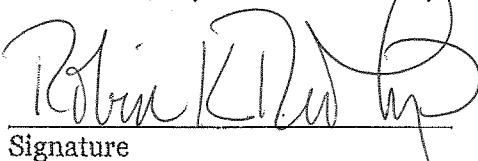
10/8/14
Date

I, the undersigned, have read and understand the attached Agreed Order. I am authorized to agree to the attached Agreed Order on behalf of the entity indicated below my signature, and I do agree to the terms and conditions specified therein. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation.

I also understand that failure to comply with the Ordering Provisions, if any, in this order and/or failure to timely pay the penalty amount, may result in:

- A negative impact on compliance history;
- Greater scrutiny of any permit applications submitted;
- Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency;
- Increased penalties in any future enforcement actions;
- Automatic referral to the Attorney General's Office of any future enforcement actions; and
- TCEQ seeking other relief as authorized by law.

In addition, any falsification of any compliance documents may result in criminal prosecution.


Signature

8-11-14
Date

ROBIN K PROKOP
Name (Printed or typed)
Authorized Representative of
MEMC Pasadena, Inc.

PLANT MANAGER
Title

Instructions: Send the original, signed Agreed Order with penalty payment to the Financial Administration Division, Revenue Operations Section at the address in Section IV, Paragraph 1 of this Agreed Order.

Attachment A
Docket Number: 2013-1858-AIR-E
SUPPLEMENTAL ENVIRONMENTAL PROJECT

Respondent:	MEMC Pasadena, Inc.
Penalty Amount:	One Hundred Twenty-Six Thousand Five Hundred Sixty Dollars (\$126,560)
SEP Offset Amount:	Sixty-Three Thousand Two Hundred Eighty Dollars (\$63,280)
Type of SEP:	Contribution to a Third-Party Pre-Approved SEP
Third-Party Administrator:	Houston-Galveston Area Council-AERCO ("AERCO")
Project Name:	<i>Clean Vehicles Partnership Project</i>
<u>Location of SEP:</u> Angelina, Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Hardin, Harris, Houston, Jasper, Jefferson, Liberty, Matagorda, Montgomery, Nacogdoches, Newton, Orange, Polk, Sabine, San Augustine, San Jacinto, Trinity, Tyler, Walker, Waller, and Wharton Counties	

The Texas Commission on Environmental Quality ("TCEQ") agrees to offset a portion of the administrative penalty amount assessed in this Agreed Order for the Respondent to contribute to a Supplemental Environmental Project ("SEP"). The offset is equal to the SEP Offset Amount set forth above and is conditioned upon completion of the project in accordance with the terms of this Attachment A.

1. Project Description

a. Project

The Respondent shall contribute the SEP Offset Amount to the Third-Party Administrator named above. The contribution will be to the **Houston-Galveston Area Council-AERCO** for the *Clean Vehicles Partnership Project*. The contribution will be used in accordance with the SEP between the Third-Party Administrator and the TCEQ (the "Project"). Specifically, the SEP Offset Amount will be used to to replace old, higher emission buses that do not meet 2010 Environmental Protection Agency ("EPA") emissions standards ("Old Buses") with new, lower emission buses that meet the most recent EPA emissions standards ("New Buses") or to retrofit or convert Old Buses with emissions reducing equipment. The Third-Party Administrator shall allocate the SEP Offset Amount to public entities such as school districts, local governments, and public transit authorities ("SEP Administrators") that apply for replacement, retrofit, or conversion of buses.

The SEP Offset Amount may also be used for retrofit or conversion technology that brings an Old Bus up to current EPA emissions standards. New Buses may be

alternative-fueled. The SEP Offset Amount may be used for up to 100% of the replacement, conversion, or retrofit cost. The SEP Offset Amount will be used only for purchase of New Buses or conversion or retrofit equipment and contract labor for installation of equipment. The SEP Offset Amount will not be used for financing such a purchase through a lease-purchase or similar agreement.

Retrofitting means reducing exhaust emissions to current standards by installing devices that are verified or certified by the EPA or the California Air Resources Board as proven retrofit technologies. Converting means replacing an engine system with an alternative fuel engine system to bring the Old Bus within the current EPA emissions standards. Buses to be replaced, retrofitted, or converted must be in regular use (driven at least five hundred miles per year for at least the past two years) by the SEP Administrator and must not already be scheduled for replacement in the following twenty-four months. All replaced buses must be fully decommissioned. The Third-Party Administrator shall provide proof of decommissioning to TCEQ for each replaced vehicle by submitting a copy of the TCEQ SEP Vehicle Replacement Disposition Form. The SEP will be done in accordance with all federal, state, and local environmental laws and regulations.

All dollars contributed will be used solely for the direct cost of implementing the Project, including, but not limited to supplies, materials, and equipment. Any portion of this contribution that is not spent on the specifically identified SEP may, at the discretion of the Executive Director ("ED"), be applied to another pre-approved SEP.

The Respondent's signature affixed to this Agreed Order certifies that the Respondent has no prior commitment to make this contribution and that it is being contributed solely in an effort to settle this enforcement action. The Respondent shall not profit in any manner from this SEP.

b. Environmental Benefit

This SEP will directly benefit air quality by reducing harmful exhaust emissions that contribute to the formation of ozone and may cause or exacerbate a number of respiratory diseases, including asthma. For example, by replacing a 1989 diesel bus with a 2010 ultra-low emission model, passengers' exposure to nitrogen oxides may be reduced by 98 percent; volatile organic compounds by 93 percent; carbon dioxide by 83 percent; and particulate matter by 99 percent. In addition, by encouraging less bus idling, this SEP contributes to public awareness of air pollution and air quality.

c. Minimum Expenditure

The Respondent shall contribute at least the SEP Offset Amount to the Third-Party Administrator and comply with all other provisions of this SEP.

2. Performance Schedule

Within 30 days after the effective date of this Agreed Order, the Respondent must contribute the SEP Offset Amount to the Third-Party Administrator. The Respondent shall make the check payable to **Houston-Galveston Area Council-AERCO SEP** and shall mail the contribution with a copy of the Agreed Order to:

Houston-Galveston Area Council-AERCO
P.O. Box 22777
Houston, Texas 77227-2777

3. Records and Reporting

Concurrent with the payment of the SEP Offset Amount, Respondent shall provide the Enforcement SEP Coordinator with a copy of the check and transmittal letter indicating full payment of the SEP Offset Amount to the Third-Party Administrator. The Respondent shall mail a copy of the check and transmittal letter to:

Texas Commission on Environmental Quality
Enforcement Division
Attention: SEP Coordinator, MC 219
P.O. Box 13087
Austin, Texas 78711-3087

4. Failure to Fully Perform

If the Respondent does not perform its obligations under this Attachment A, including full expenditure of the SEP Offset Amount and submittal of the required reporting described in Sections 2 and 3 above, the ED may require immediate payment of all or part of the SEP Offset Amount.

In the event the ED determines that the Respondent failed to fully implement and complete the Project, the Respondent shall remit payment for all or a portion of the SEP Offset Amount, as determined by the ED, and as set forth in the attached Agreed Order. After receiving notice of failure to complete the SEP, the Respondent shall include the docket number of the attached Agreed Order and a note that the enclosed payment is for the reimbursement of a SEP; shall make the check payable to "Texas Commission on Environmental Quality;" and shall mail it to:

MEMC Pasadena, Inc.
Agreed Order - Attachment A

Texas Commission on Environmental Quality
Litigation Division
Attention: SEP Coordinator, MC 175
P.O. Box 13087
Austin, Texas 78711-3087

5. Publicity

Any public statements concerning this SEP and/or project, made by or on behalf of the Respondent must include a clear statement that **the Project was performed as part of the settlement of an enforcement action brought by the TCEQ**. Such statements include advertising, public relations, and press releases.

6. Clean Texas Program

The Respondent shall not include this SEP in any application made to TCEQ under the "Clean Texas" (or any successor) program(s). Similarly, the Respondent may not seek recognition for this contribution in any other state or federal regulatory program.

7. Other SEPs by TCEQ or Other Agencies

The SEP Offset Amount identified in this Attachment A and in the attached Agreed Order has not been, and shall not be, included as a SEP for the Respondent under any other Agreed Order negotiated with the TCEQ or any other agency of the state or federal government.